GPSmile51 Portable Automobile Navigation System

Product User Manual

Version: V.01

July 2005

Registered info

HOLUX and GPSmile are trademarks of HOLUX Technology, Inc.

All other trademarks belong to each registered companies.

Note

Contents of this manual will be modified without further notice.

Safety Precautions

About charging

- Please use the power adapter included with the package, using power adapters other than the provided one will result in malfunction and danger.
- The device should only be supplied with specific batteries internally.

About the power adapter

- Please do not use the power adapter in a wet environment. When hands and feet are wet, please do not touch the power adapter.
- While using the power adaptor ensure that the area is well ventilated. Do not let paper or other material cover the power adaptor, therefore interfering with the cooling effect. Do not use the power adaptor whilst it is in a bag.
- Please do not attempt to repair the device. If device is damaged or is in a wet environment, replace the device immediately.

About the battery

- Use only the original factory approved charger.
- A Lithium battery is built in to the device. To prevent fire or skin burns, please do not disassemble, pierce, impact, or expose the battery to fire. The battery will crack, explode, or release dangerous chemicals if placed in a fire.
- Important instructions
  - Note: Replacing with an incorrect battery might result in explosion. When disposing of the battery, please follow the instructions. The replacement battery must be original factory approved.
  - Recycling or disposing of batteries must follow regulations.
  - The battery should only be used in specific devices.

Warrantee Statement

- This warrantee applies to parts and services of GPSmile51 manufactured and sold through Holux Technology Inc. The local area covered is Taiwan; the warrantee length is one year from date of purchase (counting from the date on the sales receipt). Under normal user operation, Holux Technology provides free repair services.
  - The replaceable battery warrantee is six months.
  - The replaced parts after a repair are properties of Holux Technology.
- Holux Technology is not responsible for providing repairs or replacements of any software; Holux Technology does not provide any warrantee service for third party software/hardware.
- Important instructions
  - Note: This warrantee does not cover damage or malfunction from the below causes: unauthorized disassembly/modification of unit, abuse or incorrect usage, accidental and other unpreventable causes, operation under variables mentioned other than in this product user manual, using parts not made or sold by Holux Technology, or repairs done by anyone other than Holux Technology and authorized retail/service provider.
  - Expendable parts are not covered in the warrantee.
  - Any program, data, or portable storage media damages or lost are not responsible. Please contact your local Holux Technology authorized service provider to learn more about geographical limitations, proof of purchase requests, response time agreements, and other specific maintenance service requests.

Technical Support

- If there are any questions on using the product, please logon to the website www.holux.com and see the FAQ.
- If answers could not be found on the website, please send an e-mail to service@holux.com.tw Stating your location and question.

Maintenance Service

HOLUX Technology, Inc.

+886-3-6687000

Web Site: www.holux.com.tw

E-mail: service@holux.com.tw

HOLUX Technology, Inc.

www.holux.com

Contents

Preface 1
- Symbols 1
- Important Notice 1
- Functions and Features 3
- Others Functions 3
- First Time Use 4
  - Copyright 4
  - Important Notice 4
- Package Content 5

Basic Operation 6
- Introduction 6
  - Front View 6
  - Rear View 7
  - Left Side 8
  - Right Side 8
  - Top View 9
  - Bottom View 9

Getting Started 10

Preparing for Use 11
- Installing Battery 11
- Connecting to AC Adapter and Charging 12
- Using the In Vehicle Bracket 13
- Using the Car Charger 15
- Operating Method 16
  - Startup 16
  - Shutdown 16
  - Using the Function Button 17
  - Using the Stylus 18
- Using the SD Memory Card 19
- Function Menu 20

Setting 21
Time 21
Volume 22
Startup Message 22
Align Screen 23
Backlight Settings 24
Help 26
Music Playback Function 27
Storing MP3 files onto SD memory cards 27
Starting Music Playback 27
Create Custom Playlist 29
Image Browsing Function 30
Using the CD 32
Appendix 32
Troubleshooting 32
System Reset 32
Quick Troubleshooting 33
Normal Care and Maintenance 34
Storage 35
Specifications 36

Preface

We appreciate your purchase of the GPSmile 51.

Please thoroughly read all instructions regarding the product for a full understanding of its features.

Symbols

For fast reference to the data you wish to find, this manual uses the following symbols.

✓ This icon means to take note to messages and to read for while during use.

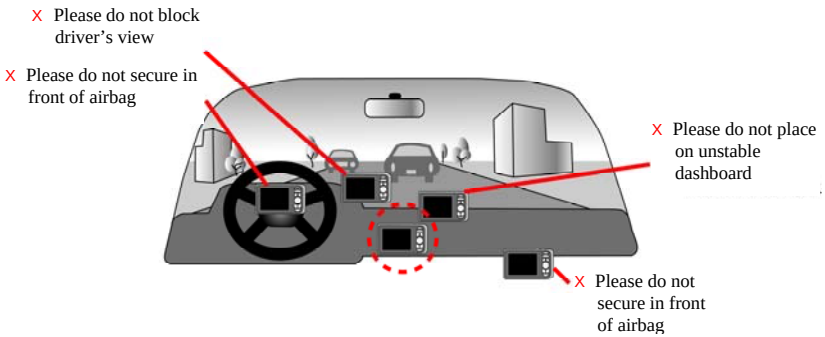
This icon means a warning and should take care not to damage the unit.

☞ This icon means useful tips for extra information while using.

Important Notice

- This system only provides a navigational reference. Please do not use this system for any directional, distance, and geographic etc precise measurements.
- The first GPS positioning should be performed at a single set point, wide-open area without building shelters. Positioning time length will depend on the satellite signal strength, cloud levels; possibly taking up to 10 minutes.
- GPS (Global Positioning System) is the satellite system by the United States of America Department of Defense. All maintenance and operations are also managed by the United States of America Department of Defense. Should the system be modified and adjusted, the precision and operation of GPS related systems might be affected.
- Any wireless communication products (mobile phone, radio, speed detection unit etc) might affect the GPS signal, resulting in a poor signal.
- For safety, please do not operate this system while driving a vehicle.

- Please do not leave this unit under your front windshield after you leave the vehicle, high temperature exposures might be dangerous and cause overheating to the battery and malfunctions.
- Window tinting might interfere with the reception of satellite signals. We recommend you install a vehicle antenna to strengthen and stabilize the signal.
- The planned navigational route is for reference only; changes in roadside conditions (one way streets, no right turns) may happen so please respond accordingly to the situation and decide whether or not to follow the planned course.
- When placing this system in the vehicle, please secure with brackets on the car to ensure safety. The recommended installation location is illustrated below.


X Please do not block driver's view
X Please do not secure in front of airbag
X Please do not place on unstable dashboard
X Please do not secure in front of airbag

✓ Differences between manufactured and shipped versions may be present; this software may be updated frequently. If the description in this manual is different from your software version, please follow the software version currently on hand.

Functions and Features

- Realistic full scene 3D view, go where you see.
- Smart road travel display, zoom-in on cross roads.
- GPS speed limit warning setting (city and highway speed limit settings).
- Voice cue for information such as turning, u-turn, distance etc.
- Highway info display and voice cueing function, including for next interchange, rest stop, tollbooth.
- GPS map rotation with road.
- GPS street traveled, administrative divisions, map directions information displays.
- Custom “speeding camera location”. Under GPS, voice cueing from a distance of 300m before encounter.

Other Functions

- Music playback: plays MP3 music files.
- Image display: displays photographs or image files.

First time use

Copyright

Without the written consent of HOLUX Technology, Inc, this manual including the product and the software may not be duplicated, transmitted, recorded or saved on storage devices; nor shall it be translated under any circumstances into any other languages.

Copyright ©2005 HOLUX Technology, Inc. All rights reserved.

Important Notice

Please read thoroughly this manual of operating instructions and explanations. Use only original factory approved batteries and accessories to prevent unexpected damage. If the correct procedures were not followed for operation or incompatible accessories were connected, this violates the warrantee agreement and will automatically void the warrantee; even causing personal safety issues.

Package Content

Your product should include the following accessories:

1

2

3

4

5

6

7

8

9

10

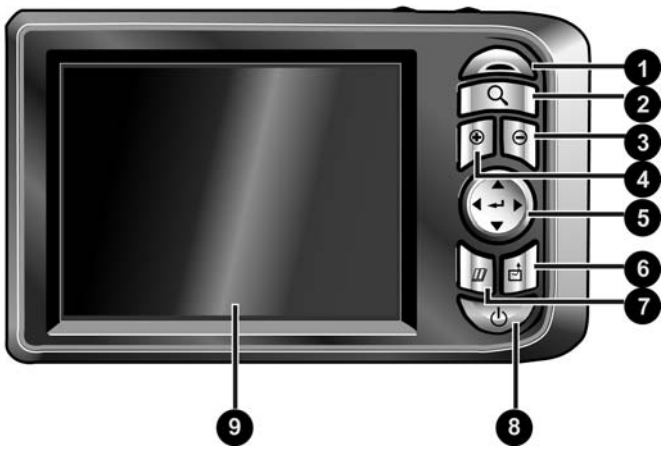
11

1	NAV-51 Unit	7	USB Charging Cable
2	In Vehicle Bracket	8	128 MB SD Memory Card
3	Bracket fixing	9	Battery
4	Base Unit for Bracket	10	CD-ROM
5	Car Adapter	11	Quick Guide
6	Travel Adapter		

Basic Operation

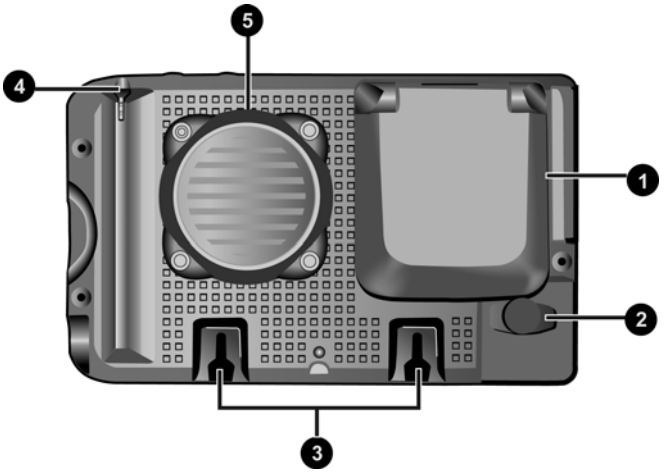
Introduction

Front View



1	**Charge Indicator**	Displays the battery charging status
2	**Find-Target Hotkey**	Press to quickly enter the destination window
3	**Zoom-Out**	Zooms out of the map
4	**Zoom-In**	Zooms in on the map
5	**Directional Pad**	Press up/down/left/right keys to move around onscreen or press-on the center to select items
6	**ESC Key**	Exits current operation
7	**Menu Directory**	Returns to the main menu window
8	**Power Button**	Switches on/off the power
9	**Touch Screen**	Displays system status/use stylus to directly input data or select items on the screen

Rear View

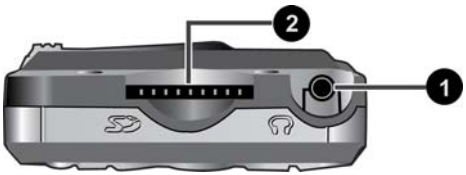


1	**Retractable Antenna**	Receives satellite signals
2	**External Antenna Connector**	For connection of an external antenna
3	**In Vehicle Securing Bracket Base**	Fast secure to the in vehicle securing bracket
4	**Stylus**	Use stylus to directly input data or select items on the screen
5	**Speaker**	Increase audio output

Left Side

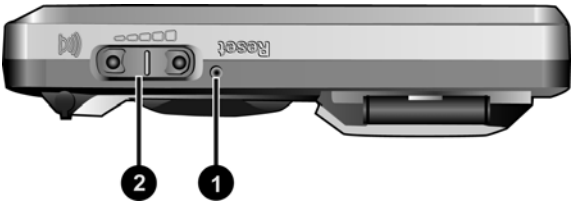
1	**Battery Lid**	Open the battery lid to replace the rechargeable battery

Right Side



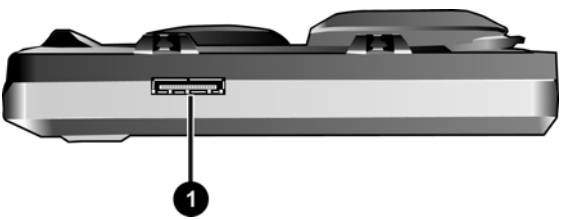
1	**Headphone Jack**	Connection to external headphones
2	**SD Memory Card Slot**	SD memory card slot, the required programs and maps are saved on this memory card, please do not remove memory card while in use.

Top View



1	**Reset**	System reset switch
2	**Volume Adjustment Key**	Adjusts volume level

Bottom View



1	**USB/Power Connection Port**	Dual function port for USB connector and charger

Getting Started

If you are a first-time system user, the following explanations will help you quickly understand the system operations, and experience the system's powerful and convenient functions.

1. **Battery installation**

   This system uses a proprietary Lithium battery, please charge after installation. For details please refer to page 12 in this manual.

2. **SD memory card installation**

   The system included memory card contains the digital map files and important data for GPS navigation. Please install first and refer to page 20in this manual.

3. **Using the stylus**

   The stylus is the main tool for operating this unit and is concealed in the pen slot on the back, pullout to use. For details please refer to page 19 in this manual.

4. **Initial GPS positioning**

   Please perform GPS positioning at an outdoor open location. Press the power switch and select [GPS] to enter the navigational screen. Select [Menu] for the control menus and then select [GPS status] to enter the GPS positioning screen. The system will automatically search for a satellite signal and begin the positioning procedure. After GPS positioning is complete, a GPS satellite status icon will appear onscreen and related data will also be shown. For details please refer to page 5 "Navigation software manual".

5. **Voice settings**

   Sets the language type. Startup > select [GPS] > press [Menu] key > enter the control menu > select [Navigation setting] > at [Language selection] select the arrows on both sides to switch between Chinese and English. For details please refer to page 58 "Navigation software manual".

6. Experience the GPS navigation

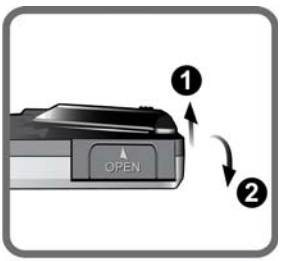
Startup > select [GPS] > press [Find] key > enter the destination screen > select [Area] > select city > zoom in/out or scroll map to find destination > select [Find nearest location] > select [Sort] > select a type > select an entry > select [Set destination] > select [Simulate navigation] > system will begin to plan a route and then start simulation of navigation. For details please refer to page 13 “Navigation software manual”.

Preparing for Use

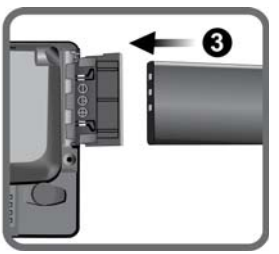
Installing battery

Please follow the procedures to install the proprietary rechargeable battery:

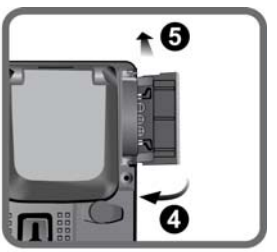
1. Follow the indicated direction to open the battery compartment.



2. Insert the rechargeable battery according to the polarity.



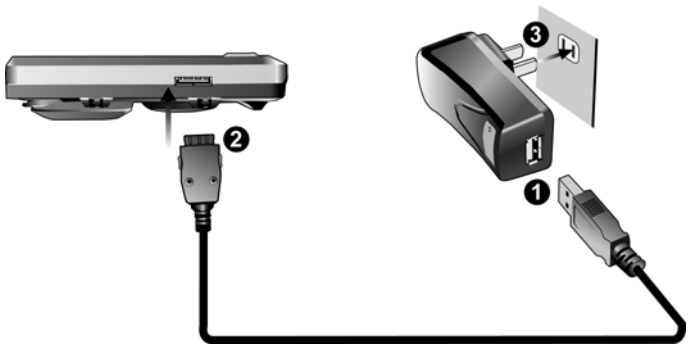
3. Follow the indicated direction to close the battery compartment.



Connecting to AC Adapter and Charging

Before first use, we strongly suggest beginning use with a fully charged battery.

1. Insert the USB connector into the adapter.
2. Insert the other end into the power port under the unit.
3. Plug the adapter into a power outlet.



4. When charging starts, the charging indicator light will be red, please wait for the charging to complete (this might take several hours). After charging is completed the indicator light will be green.

✓ This device uses a Lithium battery, please note the following:

- Please do not charge in a hot environment, such as on a balcony or expose to sunlight.

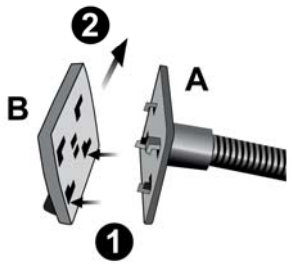
- Lithium batteries do not need to be discharged, do not wait until the battery is depleted to recharge.
- When not in use for a long period, please charge the battery every two weeks to prevent excessive discharge affecting battery performance.

☞ When charging a completely depleted battery, please wait at least one minute before system startup. Preventing excessive battery discharge.

Using the in Vehicle Bracket

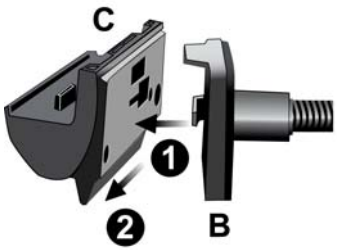
The included in vehicle bracket set can be securely suctioned on the front windshield, or using the adhesive plate, securing on top of the glove compartment. This device will effectively secure the GPS unit in the vehicle. Please follow the procedures below to secure the bracket:

1. Follow the arrows and slide the component A into component B fitting holes to secure.



☞ Please note the directions of A and B, when fitted the assembly should be tight. If the directions are incorrect, it will result in a loose fit, please reassemble.

2. Follow the indicated directions and insert B into slots on base C, slide along the arrow direction to secure.



3. Finally insert the GPS unit on to the base..

✓ When using the in-vehicle secure bracket, do not install in a location that will block the view of the driver

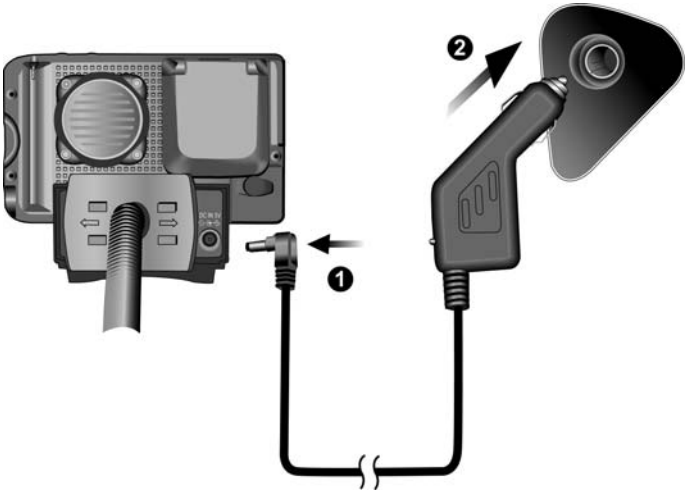
✓ Recommended installation requirements:

1. The bracket base should be secured close to the area above the dashboard to prevent excessive shock.

Using the Car Charger

While using in a vehicle, use the included car charger for long periods of usage.

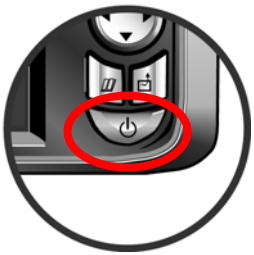
1. Plug in the car adapter small plug into the power jack on the back of the base.



2. Insert the other end into the cigarette lighter.

Operating Methods

Startup



1. Press the power button for about two seconds to turn on the power.

Shutdown

2. While power is on, press the power button to turn off power.

During the first startup, the screen will show the main screen consisting of four functions, including navigation, music, images, and settings. Directly select the icon onscreen to use the function.

Navigation	Loads the navigation program and to the navigation screen
Music	Plays MP3 music
Images	Plays images
Settings	Function adjustments and operation instructions

Using the Function Buttons

Control the main functions with the buttons on the right hand side.

1	**Find-Target Hotkey**	Fast forward to the target window, this window provides 7 location searches enabling quick setting of destinations.
2	**Zoom-Out**	Zooms out of the map
3	**Zoom-In**	Zooms in on the map
4	**Directional Pad**	Press up/down/left/right keys to move around onscreen or press-on the center to select items
5	**ESC Key**	Exits current operation
6	**Menu Directory**	Returns to the main menu
7	**Power Button**	Switches on/off the power

Using the Stylus

The stylus is the main tool for operating this unit, use the stylus to select icons/items on the screen, drag around the map to view directly, or even input hand written data.

The stylus is concealed in the pen slot on the back, pull out and extend for easy usage. Replace the stylus after use and to prevent it being misplaced.

Functions of the stylus:

Selection:

Use the stylus point to select items onscreen to enter the selected function. On the map display, select the street or indicators on the map for detailed building name or road name.

Drag:

Touch the stylus point on the screen and drag in one direction to scroll the map for direct search or landmarks.

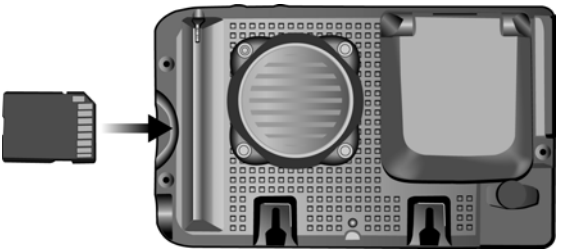
Select and hold:

Select the item/icon and hold for a second to show the floating context menu, and then select the item to be executed.

Using the SD Memory Card

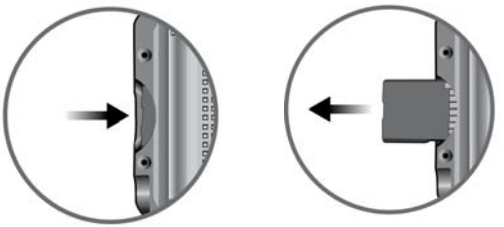
This unit is equipped with a SD memory card slot; you can purchase SD (Secure Digital) Cards to expand the memory capacity.

Insert the memory card as below: turn to the right side of the unit and with the metal contacts of the memory card facing back, insert the card into the slot.



Removing the Memory Card

1. Gently press the top of the memory card, and the card will eject automatically.



2. Then remove the memory card.

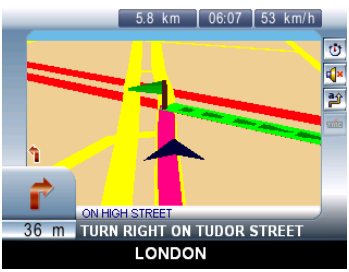
- ✓ The included memory card contains the digital map files that are required for the GPS navigational data. Please do not delete.
- ✓ When removing the memory card, please make sure the card is not reading data, or it will cause a system crash.
- ✓ Please do not set the SD memory card as write protect, or the system cannot be successfully executed.
- When operating, accidental removal of the memory card will result in showing an error message, please reinsert the memory card and the system may need to be reset before successful execution.

Function Menu

The function menu is the main function window other than the navigation screen and includes system settings, navigation settings, schedule plans, GPS status, MP3, image browsing.

Entering the Operation Menu

Under the navigation screen, press the Menu key to enter the operational menu.



For other detailed operational explanations, please refer to the navigational software manual.

Setting

The setting function gives you the ability to adjust the basic system options, including time settings, volume control, screen calibration, startup message, backlight setting, version info, and GPS reset etc... You can modify the settings according to personal preferences.

System Settings

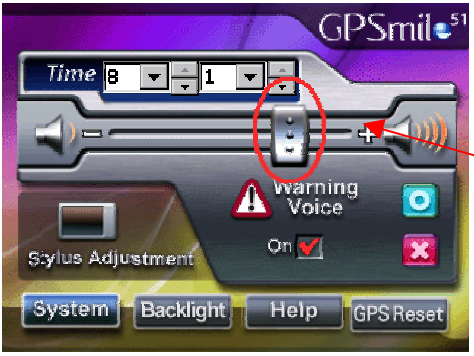
[Time]

1. After the system startup, from main menu screen, select [Setting] to go into the System Settings window.

2. Select from the [Hour] pull down menu and choose the correct value.
3. Select from the [Minute] pull down menu and choose the correct value.
4. Select to confirm, or select to keep original settings.
5. Select to return to main menu screen.

[Volume]

1. Under the settings window, control the volume directly with the scroll bar. There are six levels of volume in total.



[Startup Message]

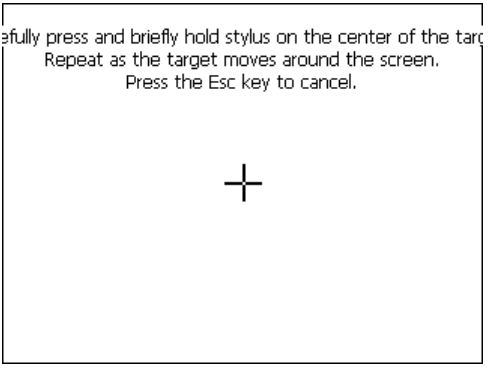
1. Under the settings window, select [Warning Voice] Off or On for whether the startup message is to be broadcast.

[Stylus Adjustment]

Control of this unit is accomplished primarily through the stylus by touching/writing on the screen. If the system cannot correctly identify your stylus' input, please run through the screen calibration procedure.

1. From the settings window, select [Stylus Adjustment] option to start the screen calibration procedure.

2. Use the stylus and touch once on the cross that's displayed in the center of the screen.


efully press and briefly hold stylus on the center of the tar
Repeat as the target moves around the screen.
Press the Esc key to cancel.

3. Touch once on the cross at the second position.
4. Touch once on the cross at the third position.
5. Follow the procedures and finish touching on the forth and fifth positions.

6. To finish the calibration procedure, press the Enter key to accept the new settings. Press the Esc key to keep the old settings.
7. Select to go back to the main menu screen.

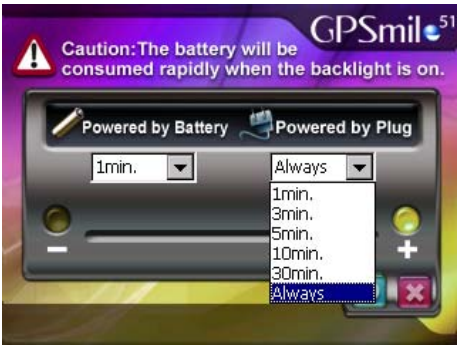
Backlight Settings

The backlight settings will adjust the brightness of the backlight and the auto-off time.

1. Under the setting window, select [Backlight] to enter the backlight settings window.

2. Select the time to turn off backlight when running off the battery. (1 min, 3 min, 5 min, 10 min, 30 min, Always On)
3. Select the time to turn off backlight when running off the external adapter. (1 min, 3 min, 5 min, 10 min, 30 min, Always On)

4. Scroll the brightness bar to control backlight brightness, six levels in total.



5. Select to confirm or select to keep the original settings.
6. Select to return to main menu screen.

Help

1. Under the setting window, select [Help] to enter the help window.

GPSmile51
In addition to the navigation system,this unit also provides functions for music playback,image browsing, and system settings.You can control and operate the system on screen with a stylus,or by using the directional keys located on the right hand side of the unit.Control the menus by moving up, down,left and right.
This unit has a complete MP3 Music Playback function capable of playing back MP3 files stored on SD memory cards.

2. The screen display will show instructions for operation of music playback and image browsing functions.

GPSmile51
In addition to the navigation system,this unit also provides functions for music playback,image browsing, and system settings.You can control and operate the system on screen with a stylus,or by using the directional keys located on the right hand side of the unit.Control the menus by moving up, down,left and right.
This unit has a complete MP3 Music Playback function capable of playing back MP3 files stored on SD memory cards.

Music Playback Function

This unit has aMP3 Music Playback function that is capable of playing back MP3 files stored on SD memory cards.

Storing MP3 files onto SD memory cards

On your computer, you must first convert the music from an audio CD into MP3 files, then save them onto the SD memory card.

Starting music playback

1. Insert the SD memory card with stored MP3 files into the SD memory card slot on the unit.
2. Power on, and select [Music] icon on main menu.

3. The Music Playback Window.

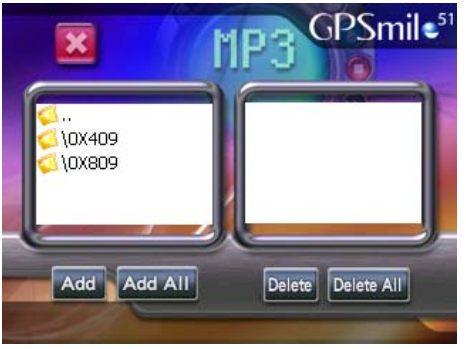
4. Use the buttons in the Music Playback Window to control each playback function.
5. For functions of different buttons in the Music Playback Window, please refer to the illustration below:

Create custom playlist

The Create custom playlist function lets you create a personalized playlist, specifying which songs to play and in what order. Adding/removing a song from the playlist will not copy or delete the actual file. It will only add/remove the path and position of the music file from the playlist.

1. Under the Music Playback Window, select [Menu] and go to the Song Selection Window.

2. .The panel on the left lists the source directories, select a directory and double click to enter the directory.



3. After loading the list of MP3 files contained in the directory, select the desired file to be played and double click to add to playlist. Or click the [Add] button to add to playlist.

4. The file will be added to the panel/playlist on the right.
5. Clicking the [Add All] button will add all songs currently in the left panel into the playlist.
6. To remove a song from the playlist, please select the song from the right panel and then click the [Delete] button.
7. Clicking the [Delete All] button at the right panel removes all songs at once.
8. Click the button to exit the Song Selection Window and go back to the Music Playback Window.

Image Browsing Function

The system has an Image Browsing function that is capable of displaying images/photographs stored on SD memory cards.

1. Insert the SD memory card with stored image files into the SD memory card slot on the unit.
2. Power on, and select [Photo] icon on Main Menu.

3. The Image Browsing Window.

4. Double click a directory in the lower right panel that stores the image files.
5. Double click the image/photograph file to be displayed.

6. Click the expand/shrink button to expand or shrink the viewed image. (1x, 2x, 4x, 8x)
7. An expanded image can be panned by dragging the stylus around on the screen.
8. Click to go back to Main Menu.

Using the CD

Appendix

Troubleshooting

System reset

Only under extremely few circumstances will it be required to reboot the system. Reset your system if the following situations occur:

1. Heavy lag experienced with screen refresh or operations, resulting in an inoperable system.
2. Cannot turn off the system with power button.
3. No response with selection on the screen.

- Use the tip of the stylus and insert into the reset switch on top of the unit.

- The system will be immediately reset.
- On the main menu screen, directly select the icon and start using.

Quick Troubleshooting

Power	Cannot startup	Insufficient batter charge, please connect to the adapter and restart system.
Screen	No screen displayed	After powering up, if the system has no response, please try the following: 1. Connect to adapter, restart system. 2. Reset system.
	Display speed is too slow	1. Please check if the battery is low on power. 2. Reset system.
	Screen has no response	Please reset system.
Navigation	GPS cannot display my current location	Make sure your current location is not obstructed by buildings or other inferences.

Normal Care and Maintenance

To ensure the unit's normal operation and extended life span, please note the following while using and storing:

Keep dry

This product is not water proof. If it comes into contact with water spray or is submerged it will seriously damage the components, resulting in irreversible damage.

Please do not drop

If violently impacted or shocked, it might cause serious damage to the unit.

Avoid sudden temperature changes

Condensation might happen when entering a warm room on a cold day. To prevent condensation from damaging the unit, please place into an airtight plastic bag before sudden temperature changes.

Keep away from strong fields

When using or storing, please keep away from strong electromagnetic/radioactive or magnetic field equipment.

Operating temperature

The products operating temperature is between -10° and 55°C; please do not operate under extreme temperatures.

Avoid sunlight exposures

Please avoid long periods of sunlight or high temperature exposure.

Using the stylus

The LCD screen is easily scratched; please use only the stylus for operation. Do not use any other sharp objects on the screen to avoid damaging the LCD screen.

Cleaning the screen

Using a soft clean cloth to wipe the screen is recommended; do not use ordinary tissue to wipe the screen.

Please do not disassemble

Please do not disassemble the product, this might void the warrantee and damage the unit.

Storage

When the product is not being used for a long period, please take the battery out and store in a cool and dry place. For long-term storage, keeping in a dry box is recommended.

Please do not keep the product in the following environments:

1. Unventilated and humid location.
2. Under a high temperature exposure through a car window.
3. Environments of humidity over 60%.

Specifications

Integrated GPS Receiver	20 parallel channels
Acquisition Time	• Reacquisition : 0.1 sec. • Hot start : 8 sec. • Warm start : 35 sec. • Cold start : 42 sec.
Accuracy	Position: 10 m. for 90% Velocity: 0.1 m/s
GPS antenna	Built-in flip-open active antenna
Handheld Software (Pre-loaded)	Companion CD: Adobe Acrobat Reader® for Pocket PC - PDF file viewer NAV-51 Handheld Manual
Processor	Centrality Atlas Processor at 200 MHz. O.S.
Operating System	Microsoft Windows CE.Net 4.2
Memory	32 MB flash memory and 64MB SDRAM memory for operating system and embedded applications
Weight	< 180 g
Size	125.5(L) x75.8 (W) x21 (H) mm (H: 26.5 antenna included)
Car Holder / Charger	Input voltage: 11V. ~ 28V. Output voltage: 5.5V. ± 0.3V.
Battery	Rechargeable 1050 mAh. Li-ion 8 hours battery life when backlight is inactive 3 hours to fully charge
Extension Slot	SD
Display	3.5" high-brightness & contrast ratio transflective TFT LCD (262k colors) with 240 x 320 (QVGA) resolution
LED	Red/Green LED for battery charging status
Audio	Built-in microphone and speaker 18 mm. stereo earphone jack
Operation Temperature	-10°~55°C
Storage Temperature	-20°~70°C
Proprietary 24-pin Connector	USB client; DC power in